WASHINGTON AGRICULTURAL CHEMICAL USAGE GREEN PEAS, PROCESSING August 2005



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GREEN PEAS, PROCESSING

Results of the 2004 Vegetable Chemical Use Survey are presented in the following tables. The survey was designed to collect data on chemical applications made from the end of the 2003 harvest through completion of the 2004 harvest from a sampling of vegetable growers in Washington.

Survey results include estimates of total area treated, number of applications, rates per application and per crop year, and total pounds of chemicals applied. Data are summarized for the active ingredients of pesticides and other chemicals applied. Pesticide data were collected for specific formulations of active ingredients (trade name products) and then converted to active ingredient. Therefore, the estimates associated with a particular active ingredient may represent applications of several trade name products. Pesticide application rates also reflect partial coverage applications as a result of band, spot, and alternate row spraying techniques. Fertilizer information was not collected on the 2004 Vegetable Chemical Use Survey.

Five states were surveyed for processing green peas in 2002 and 2004: Minnesota, New York, Oregon, Washington, and Wisconsin. Surveyed acreage totaled 182,400 acres and Washington accounted for 20 percent of total surveyed acreage.

Within the surveyed states, herbicides were applied to 88 percent of the planted acreage of processing green peas. Across the five states surveyed, the application percentages ranged from 84 percent in Wisconsin and Minnesota to 99 percent in New York and Oregon. Bentazon received the most coverage, on 51 percent of the crop. MCPA, at 33 percent coverage, and Imazethapyr, at 23 percent, were the next two most used herbicides. Insecticides were applied to 21 percent of the acreage. Dimethoate was applied to 30 percent and Esfenvalerate was applied to 18 percent of the green pea acreage. Fungicide use was minimal.

Green Peas, Processing: Fertilizer Use & Percent of Acres Treated by Program States for 2002 & 2004

	Planted Acreage		Percent of Acres Treated 1/							
State			Nitr	ogen	Phos	phate	Potash			
	2002	2004	2002	2004	2002	2004	2002	2004		
	1,000 A	Acres	Percent							
Minnesota	80,500	71,700	65	-	43	-	49	-		
New York	21,300	19,000	97	-	95	-	99	-		
Oregon	20,300	17,700	91	-	71	-	68	-		
Washington	37,600	35,600	67	-	26	-	45	-		
Wisconsin	42,100	38,400	92	-	62	-	84	-		
TOTAL	201,800	182,400	77	-	52	-	63	-		

^{1/} Refers to acres receiving one or more applications of a specific fertilizer ingredient. - Fertilizer use was not included in the 2004 Vegetable Chemical Use Survey.

Green Peas, Processing: Pesticide Applications, Planted Acreage & Percentage Receiving Applications, Program States & Total, 2002 & 2004

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	Pla	Planted		Area Receiving 1/								
State Acr		reage	Herb	Herbicides		Insecticides		Fungicides		hemicals		
	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004		
	1,000	1,000 Acres			Percent							
Minnesota	80,500	71,700	74	84	72	3	**	**	**	**		
New York	21,300	19,000	97	99	**	5	**	**	**	**		
Oregon	20,300	17,700	99	99	98	55	**	**	**	**		
Washington	37,600	35,600	88	89	70	46	**	**	**	**		
Wisconsin	42,100	38,400	91	84	11	26	**	3	**	**		
TOTAL	201.800	182,400	85	88	54	21	**	2	**	**		

^{**} Insufficient reports to publish percent of area receiving. 1/ Refers to acres receiving one or more applications of a specific pesticide class.

Green Peas, Processing: Agricultural Chemical Applications, Washington, 2002 & 2004 1/

Active Ingredient 2/		Area Applied 3/		Applications		Rate Per Application		Rate Per Crop Year		Total Applied	
ingi edient 2/	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	
	Per	Percent		Number		Pounds P		er Acre		1,000 Pounds	
Herbicides											
Bentazon	43	51	1.0	1.1	0.12	0.72	0.12	0.80	2.0	14.5	
Clomazone	2	4	1.0	1.0	0.18	0.16	0.18	0.17	0.1	0.3	
Glyphosate	38	16	1.0	1.1	0.45	0.61	0.45	0.66	6.4	3.7	
Imazethapyr	16	23	1.0	1.0	0.04	0.03	0.04	0.03	0.3	0.3	
MCPA	25	33	1.0	1.0	0.35	0.28	0.36	0.29	3.4	3.4	
MCPA, dimethylamine salt	-	8	-	1.1	-	0.34	-	0.39	-	1.1	
Metribuzin	7	13	1.0	1.1	0.10	0.11	0.11	0.13	0.3	0.6	
Quizalofop-P-ethyl	5	17	1.0	1.1	0.07	0.07	0.07	0.07	0.1	0.4	
Sethoxydim	-	22	-	1.0	-	0.29	-	0.29	-	2.3	
Trifluralin	7	14	1.2	1.0	0.49	0.51	0.60	0.52	1.6	2.6	
Insecticides											
Diazinon	3	-	1.0	-	0.33	-	0.33	-	0.4	-	
Dimethoate	29	30	1.1	1.0	0.20	0.25	0.22	0.25	2.4	2.8	
Esfenvalerate	31	18	1.0	1.1	0.04	0.04	0.04	0.05	0.4	0.3	

^{1/} Planted acres in 2002 and 2004 for Washington were 37,600 acres and 35,600 acres, respectively.

Note: Data may not multiply across due to rounding.

Green Peas, Processing: Agricultural Chemical Applications, Program States, 2002 & 2004 1/

Active Ingredient 2/	Area Applied 3/		Applications		Rate Per Application		Rate Per Crop Year		Total Applied	
nigredient 2/	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
	Percent		Number		Pounds P		er Acre		1,000 Pounds	
Herbicides										
Bentazon	27	27	1.0	1.0	0.11	0.74	0.11	0.77	6.0	38.2
Clomazone	6	14	1.0	1.0	0.44	0.44	0.44	0.44	5.0	10.9
Glyphosate	9	10	1.0	1.0	0.45	0.58	0.45	0.60	7.9	10.6
Imazamox	*	1	1.1	1.0	0.02	0.02	0.03	0.02	**	0.1
Imazethapyr	32	34	1.0	1.0	0.04	0.04	0.04	0.04	2.7	2.3
MCPA	6	9	1.0	1.0	0.33	0.28	0.33	0.29	3.9	4.6
MCPA, dimethylamine salt	-	2	-	1.1	-	0.34	-	0.39	-	1.1
MCPB	15	11	1.0	1.0	0.55	0.45	0.58	0.45	17.1	9.3
Metribuzin	3	3	1.0	1.1	0.15	0.12	0.16	0.14	0.8	0.7
Pendimethalin	40	48	1.0	1.0	0.66	0.58	0.69	0.60	55.9	52.5
Quizalofop-P-ethyl	2	3	1.0	1.1	0.06	0.07	0.06	0.07	0.3	0.4
S-Metolachlor	3	2	1.0	1.1	1.24	1.09	1.24	1.16	7.5	3.6
Sethoxydim	6	8	1.0	1.0	0.27	0.28	0.27	0.28	3.1	4.0
Triallate	3	3	1.0	1.0	1.06	1.14	1.09	1.19	6.7	6.1
Trifluralin	15	13	1.0	1.0	0.46	0.47	0.47	0.47	13.9	11.1
Insecticides										
Bifenthrin	1	1	1.0	1.0	0.03	0.03	0.03	0.03	0.1	0.1
Diazinon	*	-	1.0	-	0.33	-	0.33	-	0.4	-
Dimethoate	17	14	1.2	1.0	0.19	0.22	0.24	0.23	8.5	5.9
Esfenvalerate	8	1	1.0	1.0	0.03	0.03	0.03	0.03	0.5	0.1
Zeta-cypermethrin	27	6	1.0	1.1	0.05	0.03	0.05	0.04	2.6	0.4
Fungicides										
Azoxystrobin	-	1	-	1.0	-	0.13	-	0.13	-	0.2

^{*} Area applied to less than one percent. ** Total applied is less than 50 pounds. Rate is less than .0005 pounds per acre.

^{2/} Insufficient reports to publish data for the following agricultural chemicals: 2002: <u>Herbicides</u>: Atrazine, Halosulfuron, MCPB, Paraquat, Pendimethalin, Propachlor, Sethoxydim, Triallate. <u>Insecticides</u>: Ethoprop, Phosmet, Zeta-cypermethrin. 2004: <u>Herbicides</u>: Dicamba, Dimethenamid-P, Fluroxypyr, Pendimethalin, Triallate. <u>Insecticides</u>: Diazinon, Esfenvalerate, Lambda-cyhalothrin, Petroleum distillate, Phosmet. <u>Fungicides</u>: Sulfur. <u>Other Chemicals</u>: Cytokinins.

^{3/} Refers to acres receiving one or more applications of a specific agricultural chemical.

^{1/} Planted acres in 2002 and 2004 for the 5 major states were 201,800 acres and 182,400 acres respectively. The states included in both 2002 and 2004 were MN, NY, OR. WA. and WI.

^{2/} Insufficient reports to publish data for the following agricultural chemicals: 2002: <u>Herbicides</u>: Atrazine, EPTC, Glyphosate diam salt, Halosulfuron, MCPA, dimethyl. salt, Paraquat, Propachlor. <u>Insecticides</u>: Ethoprop, Malathion, Petroleum distillate, Phosmet. 2004: <u>Herbicides</u>: Dicamba, Dimethenamid-P, Ethalfluralin, Fluroxypyr, Glyphosate diam salt. <u>Insecticides</u>: Acephate, Carbaryl, Cyromazine, Diazinon, Lambda-cyhalothrin, Methoxychlor, Petroleum distillate, Phosmet. <u>Fungicides</u>: Captan, Copper hydroxide, Sulfur. <u>Other Chemicals</u>: Cytokinins.

^{3/} Refers to acres receiving one or more applications of a specific agricultural chemical. Note: Data may not multiply across due to rounding.